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Docket No.: 416-001



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David W. Perrego) Law Office 3764
Serial No.: 09/740,169) Trademark Attorney:
Filed: December 19, 2000) Quang Thanh
Title: THE VERTICAL TRACTION)
AND ASSEMBLY AND METHOD)

Honorable Commissioner
for Patents and Trademarks
Washington, D.C. 20231

I hereby certify that this correspondence is being deposited with the United States Postal Service as **First Class Mail** in an envelope addressed to:
Honorable Commissioner of Patents and Trademarks, Washington, DC
20231 on August 8, 2002.

By: 

RESPONSE

Sir,

In response to the outstanding office action dated May 8, 2002 please amend the application as follows.

Drawing Amendment Submission

Applicant submits the attached proposed amendments to the drawings that overcome the specific objections under Rule 1.83(a). Approval of the proposed amendments is requested.

Abstract of the Disclosure

Please add the new abstract of the disclosure as a separate sheet attached to this amendment. The new abstract was also filed July 30, 2002 in response to a "Notice to File Corrected Application Papers" dated July 17, 2002.

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In the Written Description**Page 3, line 22, amend the third paragraph to read:**

U.S. Patents 4,194,500; 4,269,179; and 4,524,763 each disclose a gravity spine traction device combining the use of an inclined surface having a frame from which a traction brace depends and girds the torso of patients using the device to receive back stretching treatments. These earlier patents recognize that about 45% of the body weight is in the lower half of the body and have designed upper body harnesses which firmly attach to the patients body just below the rib cage. The supporting frame of a board assembly allows the patient to be suspended on a board so that the weight of the lower body applies tension force to the patient's lumbar spine region. Patent 4,524,763 specifically describes a frame and torso harness system adapted to maintain the thigh portion of the patient's legs in variable angular relation to the long axis of the patient's spine when applying tension traction. The assembly of Patent 4,269,179 requires a block and tackle pulley mechanism to hoist the patient off the floor to a traction force-imposing position. U.S. Patent 4,194,500 assembly includes a pair of spaced apart single foot steps on which the patient stands to don the torso harness and then removes both feet from the steps to suspend from the frame as shown.

In the Claims

Please amend claims 1, 2, 7, 9, 13, and 16 to read:

1. A vertical traction assembly for using gravity to stretch a person's spine, said assembly comprising:
 - a) frame means and torso harness means coupled to depend from said frame means,
 - b) said harness means being effective to maintain a person in a vertical traction suspension position after the person dons said harness means, and

d) traction force focusing means attached to the frame means for applying a predetermined amount of focused traction pressure directly to a selected location along the spine of the person who is in said vertical traction suspension position.

2. An assembly as defined in claim 1 wherein

stand means disposed on said frame means includes non-traction receiving surface means on which a person stands for donning the torso harness means before applying said predetermined amount of focused traction pressure.

7. An assembly as defined in claim 1 wherein

said frame means is free standing and said harness means depends downwardly from said frame means,

said focused traction force means being effective to derive said focused traction pressure from a portion of the weight of the person in said traction position, and

said vertical traction suspension position is a gravity traction suspension position with said person being vertically suspended with the harness means to produce said focused traction pressure.

9. A vertical traction assembly for using gravity to stretch a person's spine, said assembly comprising:

a) frame means and torso harness means coupled to flexibly depend from said frame means, and

b) stand means mounted to said frame means to provide a first non-traction receiving surface on which a person may stand to don the torso harness means and a second partial traction receiving surface on which a person may stand to adjust said harness means with respect to the

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person's torso and assembly before the person voluntarily steps to a vertical, gravity traction suspension position,

c) said harness means being effective to suspend the person from the frame means for a partial traction pressure when the person stands on said second partial traction receiving surface after donning said harness means,

e) said partial traction pressure being less than a full traction pressure that is applied to the person who is in said vertical, gravity traction suspension position.

13. An assembly as defined in claim 10 wherein

said frame means includes a front rearwardly tilted frame portion including backboard means,

said traction force focusing means includes pad element means adjustably mounted to the backboard means and releasable fastening means for selectively positioning the pad element means with respect to a person using said assembly to undergo vertical traction treatment in a full suspension position.

16. A traction method for treating an inflamed area adjacent a person's backbone, said method comprising:

a) providing frame means and torso girding means coupled to flexibly depend from said frame means, said frame means including traction force focusing means for applying an amount of focused traction pressure directly to a selected location along the spine of the person who is in a vertical, gravity traction suspension position,

b) girding said person with said torso girding means,

c) deriving a horizontally directed traction pressure from the weight of said person who is in said vertical, gravity traction suspension position, and

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d) applying said traction pressure with said traction force focusing means directly to said inflamed area along the spine of said person while suspended in said vertical, gravity traction suspension position.

Version of Amendments with Markings to Show Changes Made.

In the Written Description

Page 3, line 22, amend the third paragraph bridging pages 3 and 4 to read:

U.S. Patents 4,194,500; 4,269,179; and 4,524,763 each disclose a gravity spine traction device combining the use of an inclined surface having a frame from which a traction brace depends and girds the torso of patients using the device to receive back stretching treatments. These earlier patents recognize that about 45% of the body [wight] weight is in the lower half of the body and have designed upper body harnesses which firmly attach to the patients body just below the rib cage. The supporting frame of a board assembly allows the patient to be suspended on a board so that the weight of the lower body applies tension force to the patient's lumbar spine region. Patent 4,524,763 specifically describes a frame and torso harness system adapted to maintain the thigh portion of the patient's legs in variable angular relation to the long axis of the patient's spine when applying tension traction. The assembly of Patent 4,269,179 requires a block and tackle pulley mechanism to hoist the patient off the floor to a traction force-imposing position. U.S. Patent 4,194,500 assembly includes a pair of spaced apart single foot steps on which the patient stands to don the torso harness and then removes both feet from the steps to suspend from the frame as shown.

In the Claims:

Please amend claims 1, 2, 7, 9, 13, and 16 as follows:

1. A vertical traction assembly for using gravity to stretch a person's spine, said assembly comprising:

- a) frame means and torso harness means coupled to depend from said frame means,
- b) said harness means being effective to maintain a person in a vertical traction

suspension position after the person dons said harness means, and

d) [focused] traction force focusing means attached to the frame means for applying a predetermined amount of focused traction pressure directly to a selected location along the spine of the person who is in said vertical traction suspension position.

2. An assembly as defined in claim 1 wherein

stand means disposed on said frame means includes non-traction receiving surface means on which a person [may stand] stands for donning the torso harness means before applying said predetermined amount of focused traction pressure.

7. An assembly as defined in claim 1 wherein

said frame means is free standing and said harness means depends downwardly from said frame means,

said focused traction force means being effective to derive said focused traction pressure from a portion of the weight of the person in said traction position, and

said vertical traction suspension position is a gravity traction suspension position with said person being vertically suspended with the harness means to produce said focused traction pressure.

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9. A vertical traction assembly for using gravity to stretch a person's spine, said assembly comprising:

- a) frame means and torso harness means coupled to flexibly depend from said frame means, and
- b) stand means mounted to said frame means to provide a first non-traction receiving surface on which a person may stand to don the torso harness means and a second partial traction receiving surface on which a person may stand to adjust said harness means with respect to the person's torso and assembly before the person voluntarily steps to a vertical, gravity traction suspension position,
- c) said harness means being effective to suspend the person from the frame means for a partial traction pressure when the person stands on said second partial traction receiving surface after donning said harness means,
- e) said partial traction pressure being less than a full traction pressure that is applied to the person who is in said vertical, gravity traction suspension position.

13. An assembly as defined in claim 10 wherein

said frame means includes a front rearwardly tilted frame portion including backboard means, said [focused] traction force focusing means includes pad element means adjustably mounted to the backboard means and releasable fastening means for selectively positioning the pad element means with respect to a person using said [assemble] assembly to undergo vertical traction treatment in a full suspension position.

16. A traction method for treating an inflamed area adjacent a person's backbone, said method comprising:

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- a) providing frame means and torso girding means coupled to flexibly depend from said frame means, said frame means including traction force focusing means for applying an amount of focused traction pressure directly to a selected location along the spine of the person who is in a vertical, gravity traction suspension position.
- b) girding said person with said torso girding means,
- c) deriving a horizontally directed traction pressure from the weight of said person who is in [a] said vertical, gravity traction suspension position, and
- d) applying said traction pressure with said traction force focusing means directly to said inflamed area along the spine of said person while suspended in said vertical, gravity traction suspension position.

REMARKS

Traverse of Requirement for Restriction

Applicant respectfully traverses the requirement for restriction wherein the examiner says that Applicant's claimed traction assembly "can be practiced with another materially different product" or that Applicant's claimed traction assembly "can be used in a materially different process of using that product." As amended, the claimed traction assembly includes "traction force focusing means attached to the frame means for applying a predetermined amount of focused traction pressure directly to a selected location along the spine of the person who is in said traction position." And the claimed traction method provides "traction force focusing means for applying a predetermined amount of focused traction pressure directly to a selected location along the spine of the person who is in said traction position," and the claimed step of "applying said traction pressure with said traction

force focusing means directly to said inflamed area along the spine of said person while suspended in said vertical, gravity traction suspension position.”

Based on the foregoing facts, the claimed traction assembly as amended can only perform the claim method as amended. And the claimed method as amended can only be performed by the claimed traction assembly as amended. For these reasons, although the examiner never explains how the originally claimed assembly “can be used in a materially different process” or “the process using the product as claimed can be practiced with another materially different product,” Applicant has amended claims 1 and 16 so that no question remains as to the direct association between Applicant’s claimed traction assembly and traction method. The amendments do not require a further search for the examination of method claims 16-19.

In view of the foregoing, withdrawal of the rejection under 35 USC 112 is requested.

Response to Rejection under 35 USC § 112

The examiner states that the subject matter of Claims 4 and 15 is not described in Applicant’s application as originally filed. Applicant directs attention to the disclosure at page 11, line 7, to page 12, line 6, which reads:

“Front frame portion 20 is disposed at a rearward slant angle of about 15 to 20 degrees with respect to the vertical direction. At this slant angle, the weight of a patient's legs is focused directly beneath the backbone along a vertical line of gravity and gives a more direct traction pressure on the inflamed and pain affected area when the patient is in a suspended traction position. When a patient is in a fully suspended position, his back is not secured to backboard 24. So his upper body is at an angle of about 13 degrees to the vertical direction because the patient's shoulders come forward with respect to backboard 24 and his upper body is more vertically disposed upon stepping into a fully suspended position.

“In this embodiment, front portion 20 is at a 17 degree angle to the normal. Backboard 24 is composed of either ½ inch thick finished plywood or an aluminum panel having a thickness of about ¼ inch or less and is about ten (10) inches wide. Backboard 24 slants rearwardly with front portion 20, has a bottom edge spaced 31 to 36 inches upwardly from the floor, and extends

another 35 inches vertically from the floor with slots 26 extending 14 inches vertically. Traction focusing pad element 25 is about 6 inches long to extend across slots 26 to distribute traction pressure transversely across a patient's spinal column. Pad element 25 is composed of resilient padding material and protrudes outwardly from backboard 24 by a distance of about 2 to about 4 inches. A greater distance between the outer engaging surface of pad element 25 and backboard 24 is effective to treat patients having curvature of the spine. Where there is no curvature, a smaller pad element may be used. In a specific embodiment, pad element 25 extends outwardly from backboard 24 for about 3½ inches. Traction pressure focuses at the point where pad element 25 bears against an inflamed area along the patient's backbone and is equal to about 40% of the patient's total weight."

In regard to the foregoing quote from Applicant's originally filed disclosure, the determination of "traction pressure" being "equal to about 40% of the patient's total weight" is a matter of a mathematical computation, and conforms to the prior art knowledge discussed in Applicant's background of his invention. For these reasons, it is respectfully submitted that "any person skilled in the art to which [the claimed invention] pertains" would be able "to make and use the same." Withdrawal of this rejection of claims 4 and 15 is therefore respectfully asked.

Response to Rejections under 35 USC § 102

The examiner rejects claim 1 under 35 USC § 102(b) as being anticipated by Chitwood (5,662,597). When compared with the amended claim 1, however, several limitations differ from the Chitwood gravity traction device including the fact that, contrary to the examiner's allegation, Chitwood does **not** disclose a traction force focusing means "for applying a predetermined amount of focused traction pressure directly to a selected location along a user's spine." For Chitwood's "ridge or shoulder 34" bears "against the occipital bone of the user's head received in the head receiving member" and **not** against the user's spine as in Applicant's originally filed claimed. Moreover, claim 1 now specifically recites that Applicant's torso harness means is "effective to maintain a person in a vertical traction suspension position after the person dons said harness means." Chitwood's device does not maintain "a person in a vertical traction suspension position" but the user's entire spine

simply rests against his inclined backrest. Users of Applicant's assembly rest against the claimed "traction force focusing means" that does not exist in the Chitwood device as explained above. For these reasons, Chitwood is incapable of anticipating Applicant's amended claim 1.

Claim 9 is rejected as being anticipated by Burton (4,205,665) that discloses a rotatable inclined member that includes an "adjustable foot stop 93 [that] is located at the foot of bed 58," and "is constructed of an upper platform 94 and lower platform 96," not "93" as alleged. A "crank operated scissors mechanism 102 (located on platform 96) may be operated (obviously by someone other than the patient) to adjust the position of upper platform 94 to just below the patient's feet as a safety device to help protect the patient from a fall if one of the primary support elements fails." In short, Burton's foot stop does not constitute a "stand means" having "a first non-traction receiving surface" upon which the patient may stand to don the torso harness of Applicant's device. And Applicant has a "second partial traction receiving surface" unlike Burton who has only one surface available on platform 94 that is required only if the Burton patient falls. For these reasons, Burton is unable to anticipate Applicant's amended claim 9.

Response to Rejections under 35 USC § 103

Claims 2-6, 8, and 15 are rejected as being unpatentable over Nelson in view of Burton. Nelson discloses a device that does not place the patient in "a vertical traction suspension position" but simply reciprocates the flat table has no "traction force focusing means," but has a frame that "can be reciprocated between first and second [slightly inclined] positions to place the body in gentle oscillating traction" (Nelson abstract). Burton does not teach Nelson's deficiency of a "traction force focusing means" so that even if the proposed combination of references were appropriate, the resultant structure of these claims that are dependent on claim 1 would not lead one having ordinary

skill in the art to produce an assembly as set forth in these claims. Moreover, the above comments made with respect to Burton show that foot stop 93 fails to teach the use of a “non-traction receiving surface on which a person stands for donning the torso harness means.” The Burton harness is placed on the patient while in a prone position by another person who has no involvement in the initial donning of the Burton harness as in Applicant’s assembly. For these reasons, no teaching exists in either Nelson or Burton to first combine the references, and no one having ordinary skill in the art would be led to produce Applicant’s assembly that includes structure and functions that are not disclosed in either Nelson or Burton. Withdrawal of this obviousness rejection is respectfully requested for these reasons.

Claims 4-6, 8, and 15 are rejected over Burton who is said to suggest “that the predetermined amount of focused traction pressure is equal to about 40% of the weight of the person.” Yet Burton fails to teach any of the limitations of claims 1 and 2 from which claims 4-6, 8, and 15 depend. The point of this limitation in Applicant’s assembly is that no extreme amount of force is applied to the “selected location along the spine of the person” who is in the claimed vertical traction suspension system. Such a focused amount of traction pressure is unique when compared to any of the conventional types of traction systems of record herein. And as thoroughly discussed above, Burton discloses an emergency “foot stop” and not “a stand means” as alleged. The Burton foot stop has a completely different structure and purpose when compared with Applicant’s claim “traction receiving” surfaces. At no time is the Burton patient able to stand on the “lower platform 96” as alleged. For the “scissors mechanism 102” clearly precludes that. And contrary to the examiner’s analysis, Burton discloses no means whatsoever that focuses the traction pressure against the “inflamed area of the person’s back” but dissipates the pressure of the disclosed device along the

entire spine of the patient. Applicant's assembly can produce the desired results in a matter of minutes compared to a Burton patient who "may spend a significant period of time at a given angle, generally one or several hours or longer, but in any case not more than is commensurate with the patient's ability to withstand the physical stress" (col. 3, lines 53-57).

Summary and Conclusion

None of the references of Chitwood, Nelson, and Burton disclose the unique structural configurations and specific functions set forth in Applicant's amended claims. And nothing in any of the references lead one having ordinary skill in the art to make the combinations of references used to reject claims as being obvious over the prior art. And nothing in these references, singularly or in commutation, suggests achieving satisfactory new and unexpected results in pain relief for patient users in a matter of minutes as compared to the necessity of spending extended time in the prior art traction devices. For the foregoing reasons, Applicant respectfully requests that the various rejections and objections be withdrawn and that the application be allowed to issue.

Respectfully submitted,

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By

Neil F. Markva

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